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ABSTRACT

The second in a series of manuals on adults with learning disabilities, the booklet covers assessment techniques. The nature of assessment as an ongoing process is stressed, and the role of observation (both systematic and nonsystematic) and interview data are discussed. A seven-step evaluation sequence is proposed, with the major goal of interpreting the error patterns which will indicate processing strengths and weaknesses. The importance of the interview between adult education teacher and adult student is pointed out, and guidelines are suggested for structuring the interview environment. The contribution of adult education teachers to evaluation of cognitive functioning is noted. Specific measures for assessing general cognitive ability, language, academic achievement, written expression, and personality are listed. Two bibliographies are appended--one on neurological assessments, screening and placement, and prevailing assessment strategies; and one on general background information for adult education teachers encountering a learning disabled student. (CL)

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Academic Assessment and Remediation
of Adults with Learning Disabilities:

A Resource Series for Adult Basic Education Teachers

APPRAISAL AND ASSESSMENT OF LEARNING DISABILITIES

Five County Adult Education Program
(Barrow, Clarke, Jackson, Oconee, and Oglethorpe Counties)
Clarke County Board of Education
Athens, Georgia 30601

1984

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All adults who have not completed high school are potential clients for our Adult General Education Program and are aggressively recruited. Most of them with motivation proceed normally through our instructional program until they reach their goal. While following the progress of our students, we observed that some of them made slower progress and gained lower than expected achievement levels. These students did not reach their goal or our goal for them, although many had good motivation, seemed alert and bright, and occasionally made excellent progress in one or more skills. An awareness grew that a significant number of the students might be learning disabled.

Assistance was at hand from the University of Georgia, Department of Special Education, in the persons of Dr. Cheri Hoy and Dr. Noel Gregg, who met with the staff of the project for planning, worked with our adult education teachers in workshops, as well as wrote our project publications. Our appreciation is also expressed to the teachers of the five-county program for their participation, to Mrs. Betty Westbrook, Athens, for her extra-hours typing of the manuscripts, to Ms. Shelby Johnson, Snellville, for editorial assistance, and to Dr. Edward T. Brown, Stone Mountain, for facilitating the development and production processes.

Dr. Janie Rodgers
Project Director

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For Use With Learning Disabled Students.

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THE PROCESS OF ASSESSMENT

Every individual participates in some type of assessment each day, whether it be formal or informal. The process is identical despite the purpose of the evaluation. An individual perceives information, judges the data, and makes a decision. Whether the decision involves the fact that your car needs a new battery or the adult student requires specific reading instruction, the process remains the same.

Sources of Information

Assessment is often viewed as a set of formal tasks which are administered before instruction is begun. Such a view is too restricted and creates a mind set which allows the teacher to ignore many valuable clues to identifying a cause for the student's deficiency. A more productive approach is the view that assessment is an ongoing process which continually adds new information about the adult student's functioning. This new information is necessary to the modification of teaching strategies. The view of assessment as an ongoing process is more flexible and fluid than the more traditional, lock-step approach of test-placement-teach.

Using the perspective that assessment is an ongoing process makes many more sources of information available to the adult education teacher. The kind of difficulties faced by the student will require a teacher to use one or more formal or informal tests to establish a level for the student to begin work, and then to supplement these with observation, and interview information. At one time or another during the diagnostic process, the teacher will need to use each of these tools.

Observation Data

Observation is an important component of the on-going assessment process. Using observational procedures the adult education teacher can verify the findings of both formal and informal tests as well as study certain skills and behaviors not measured by other procedures. Salvia and Ysseldyke (1981) categorize the most common types of observation techniques as systematic and nonsystematic.

SYSTEMATIC OBSERVATION: The teacher and/or clinician determines in advance the behaviors to be measured. Behaviors are counted for a predetermined period of time using a predetermined number of observations. This method requires time, organization and strict procedures on the teacher's part.

NONSYSTEMATIC OBSERVATION: The teacher and/or clinician must observe the individual in his/her environment and note the behaviors, characteristics, and personal habits that appear to be significant. While this method is less specific, it provides anecdotal information which is very useful in beginning to understand how an individual responds to various instructional and/or social tasks.

Information gained from both observational techniques should be interpreted along with various formal and informal test results but the adult education teacher must be aware of the limitations of observational data. Two important limitations of which are teacher bias and narrowness of the behavior sampled.

Interview Data

Valuable information can be gathered from interviews and questionnaires. This information can be used for both instructional and vocational planning. It is important to recognize, however, that the results of interviews and questionnaires are descriptive data that rely on the memory of the individual and the skill of the interviewer, either of which may be flawed. A discussion of interviewing techniques is presented later.

The Evaluation Sequence

A systematic approach is critical to the on-going assessment process. Such a systematic approach insures that important information is not overlooked. The steps recommended to insure a systematic approach include:

- STEP 1: Know why and for what the adult is being assessed.
- STEP 2: Collect background information.
- STEP 3: Interview the adult.
- STEP 4: Observe and make a formal evaluation.
- STEP 5: Organize and inter-relate the formal and informal data.
- STEP 6: Search for patterns of strengths and weaknesses.
- STEP 7: Plan instructional strategies.

Error Patterns

The main goal of the ongoing assessment process is the interpretation of the error patterns of the learning disabled adult which are indicative of processing strengths and weaknesses. Identifying these strengths and weaknesses will facilitate the development of instructional strategies. The adult education teacher must be cognizant of the student's most efficient means of taking in information and the most efficacious means of displaying knowledge. Therefore, a careful examination of the different inputs and

response modes required is essential to determining processing strengths and weaknesses.

The following input modes must be evaluated both with formal and informal assessment tools:

1. Auditory Verbal Input (spoken language)
2. Auditory Nonverbal Input (environmental sounds)
3. Visual Verbal Input (written language)
4. Visual Nonverbal Input (pictures, graphs, and gestures)
5. Haptic Input (touch)
6. Multisensory Input (combination of the above)

These modes of input are also modes of output. However, the adult education teacher must determine if there are discrepancies between the way an individual can utilize different responses within and between modes of input and output. Awareness of different response modes can aid the adult education teacher in determining these discrepancies. The following response modes are listed from easier types of responses to more difficult types.

1. Match
2. Recognize
3. Assisted recall
4. Recall
5. Construct

Obviously, the search for processing strengths and weaknesses by systematically examining input, output, and type of response is a complex procedure. Such a procedure is essential, however, when discriminating between the learning disabled adult student and the underprepared or low ability adult student.

INTERVIEWING

Interviewing is one source of valuable information which cannot be obtained through observation or formal and informal testing. Through a structured, open-ended interview the adult education teacher has the opportunity to learn about the adult student's interests, motivation, and vocational aspirations. The quality of the information obtained, however, is dependent on the manner in which the interview is structured and the interaction between the interviewer and the student.

Interview Behavior

The following guidelines are suggested for structuring the interview environment.

1. Become an active listener. The learning disabled adult is often telling you the diagnosis. Exhibit a keen interest in what is said. Be accepting and let the individual tell his or her own story. It is important to find out what the adult considers to be important. Don't interrupt; however, do not encourage rambling and keep the adult on the track.
2. Ask questions and elicit information in a warm, non-threatening, non-judgmental way.
3. Remain sensitive to "touchy" areas. Communicate that you realize certain things are hard to discuss.
4. Remember the information you read in the file. Remembering means you care.
5. Respond to the adult's feelings as facts.
6. Be truthful and honest.

7. Respect confidentiality.
8. Keep in mind the purpose of the interview and integrate the information as you go. You are not looking for isolated information but patterns of how the individual has been functioning.
9. Refrain from making decisions for the adult.
10. Do not cut the adult off because he or she is not following your order of chosen questions.
11. Do not make a guarantee you cannot keep, i.e., "I'm sure that everything will be fine." (Can you be sure of that?)
12. Refrain from utilizing educational jargon.
13. Refrain from asking questions that you could not give an explanation for asking.
14. Refrain from playing "junior shrink". Counseling is not your purpose.
15. Refrain from appearing shocked by anything.
16. Refrain from blaming, condemning, or jumping to conclusions.
17. Refrain from appearing authoritative.
18. Refrain from becoming impatient.
19. Refrain from comparing your personal experiences to what the adult is saying. His or her problem is unique.
20. Appear well organized and handle all forms and/or papers inconspicuously.

Sample Questions

The type of questions asked determines the quality of the information that is obtained. It is important to refrain from eliciting specific, narrowly defined information. Rather, ask questions which will not only

obtain the factual information that is needed, but will also provide an opportunity to appraise the cognitive processes. Listed below are some suggested questions for use in interviewing an adult who may be learning disabled.

1. Why don't you explain in your own words some of the ways learning has been difficult for you?
2. Do these learning problems affect areas other than academic learning? For instance, how does this problem affect you on your job?
3. What are some things you have done to get around some of these problems?
4. When teachers gave you difficult tasks in school, how did you handle that situation?
5. Do you feel the learning problem interferes in your making stable relationships (i.e., work, intimate, friend)? How?
6. Describe your family's response to your learning problems.
7. Describe what you think are your strengths.
8. Where do you see yourself ten years from now?
9. What do you think would help you reach your goals?
10. Describe someone who has been a support in your life.

COGNITIVE FUNCTIONING

The learning disabled adult is defined as one who, due to cognitive processing deficits, has difficulty acquiring, storing, or retrieving information. The learning disabled adult is characterized by major discrepancies between a potential for learning and actual achievement.

Assessment of mental ability, which is usually regarded as an individual's potential for learning, must be completed by specially trained evaluators. Since adult education teachers usually do not have this training, they would not be involved in the administration and interpretation of intelligence tests. Therefore, adult education teachers are not in a position to label an individual as learning disabled. The adult education teacher can, however, provide valuable information regarding classroom performance to agencies that make this assessment. More important, they can use their observations of classroom performances to adjust and manipulate the instruction.

It can be helpful in assessing individual students to understand the differences between some of the populations that might be enrolled in an adult education program. Although many of the students flittered away their opportunities in school or were "late bloomers", others had the disadvantage of low ability, cultural disadvantage, or learning disability. The four figures which follow provides a generalized profile of these disadvantaged groups. Several comparisons should be noted: (1) I.Q. is a distinguishing characteristic between the populations; (2) except for the learning disabled, processing abilities generally approximate capability (I.Q.); (3) only the learning disabled show great variation among the cognitive processing abilities; (4) except for the culturally disadvantaged, the

range of home and school influences is considerable; and (5) acuity has equal ranges in all of the populations and is not the primary reason for learning problems.

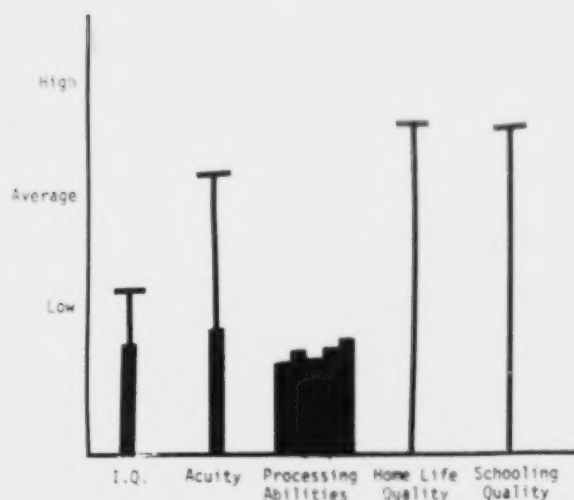


Figure 1. Mentally Retarded

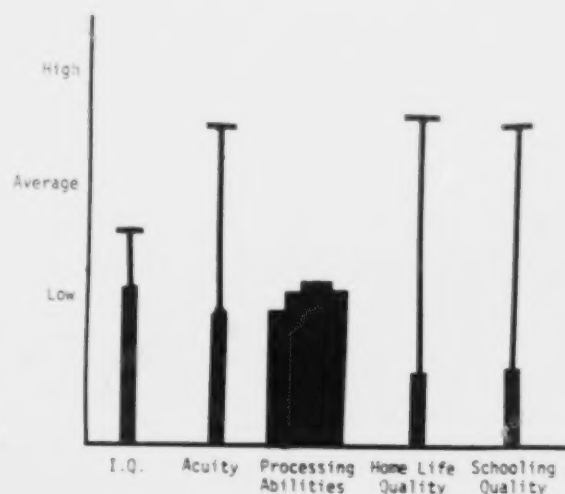


Figure 2. Slow Learner

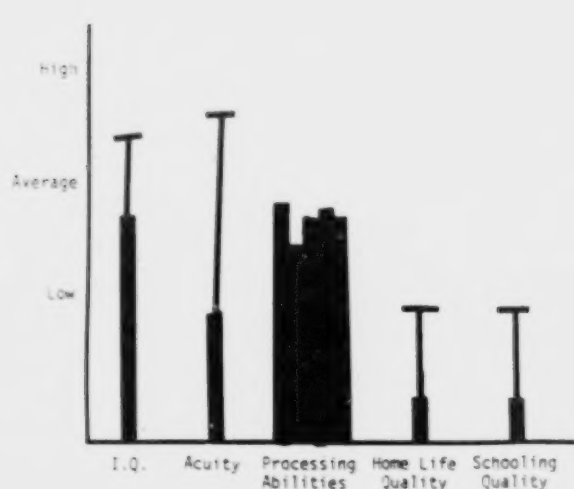


Figure 3. Culturally Deprived

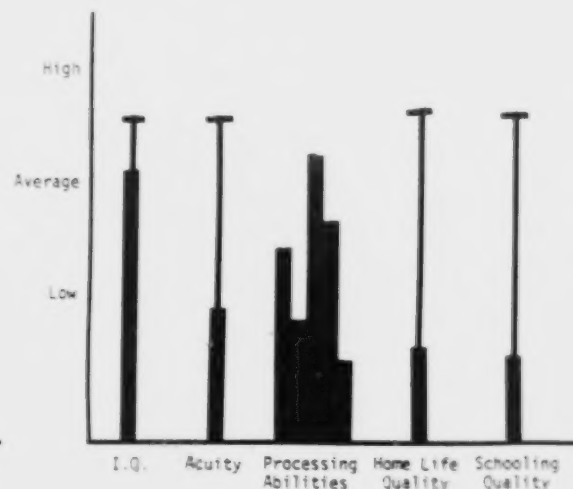


Figure 4. Learning Disabled

Note: The heavy line portion of each bar shows the minimum low level of the characteristic; the narrow line of each bar indicates the range through which each characteristic can extend.

The primary distinguishing characteristic of the mentally retarded and slow learner are, respectively, very low and low capacity (I.Q.). The primary characteristic of the culturally disadvantaged is the low level of influence from home and schooling.

The primary characteristic of the learning disabled is uneven achievement caused by varied capacity of the cognitive processes. The observant adult education teacher will recognize strengths in some academic or social area which seem inconsistent with poor achievement; materials and techniques normally productive in the development of skills with other adults are not effective with the learning disabled.

INSTRUMENTS FOR ASSESSMENT

Many instruments for diagnosing and assessing learning disabilities are available, some have been especially developed for LD clinical use, others are in general use for academic, social, or psychological appraisal. The adult education teacher will have used several of the instruments on the list and recognize many more. It is important for the teacher to know that LD specialists have extensive resources if their services are needed.

General Cognitive Ability

Detroit Tests of Learning Aptitude, Pro-Ed
 Raven Colored Progressive Matrices,
 SRA Primary Abilities Tests, Science Research Associates
 Stanford-Pinet Intelligence Scale, Houghton-Mifflin Co.
 Wechsler Adult Intelligence Scale-Revised, Psychological Corporation
 Wechsler Intelligence Scale for Children-Revised,
 Psychological Corporation
 Woodcock-Johnson Psycho-Educational Battery, Part I, Teaching Resources

Language Tests

Deep Test of Articulation: Picture Form, Sentence Form, and Screening
 Test of Articulation, Stanwix House, 1964.
 Berry-Talbott Language Test: Comprehension of Grammar, Mildred Berry,
 Rockford, Illinois,
 Boston Diagnostic Aphasia Examination, (in The Assessment of Aphasia
 and Related Disorders, Lea & Fetiger, 1972)
 Brown-Carlson Listening Comprehension Test, Harcourt-Brace-Jovanovich

- Clinical Evaluation of Language Functioning, Merrill Co.
- Detroit Tests of Learning Aptitude, Pro Ed.
- Fisher-Logemann Test of Articulation Competence, Houghton Mifflin, 1971.
- Full-Range Picture Vocabulary Test, Psychological Test Specialists, 1948.
- Fullerton Language Test for Adolescents, Consulting Psychological, Inc., 1980.
- Functional Communication Profile, Institute of Rehabilitation Medicine, NY University Medical Center, 1972.
- Goldman-Fristoe-Woodcock Auditory Memory Tests, American Guidance Services, Inc., 1974.

Academic Achievement

- Basic Achievement Skills Individual Screener (BASIS), Psychological Corporation
- Gray Oral Reading Tests, Bobbs-Merrill Co.
- Keymath Diagnostic Arithmetic Test, American Guidance Service
- Peabody Individual Achievement Test, American Guidance Service
- Stanford Diagnostic Mathematics Test, Harcourt-Brace-Jovanovich
- Test of Adult Basic Education, CTB/McGraw-Hill
- Test of Reading Comprehension, Pro-Ed
- Wide Range Achievement Test, Jastak Associates, Inc.
- Woodcock Reading Mastery Test, American Guidance Service
- Woodcock-Johnson Psycho-Educational Battery, Part II, Teaching Resources

Written Expression

- Boder Test of Reading and Spelling Patterns, Grune & Stratton
- Picture Story Language Test, Grune & Stratton
- Syntactic Maturity Test, (in Measures for Research and Evaluation in the English Arts, National Council of Teachers of English, 1975)

Written Expression, con't.

13

Test of Written Language, Pro-Ed

Test of Written Spelling, Pro-Ed

Personality

California Psychological Inventory, Consulting Psychologists Press, 1969.

California Test of Personality, California Test Bureau

High School Personality Questionnaire, (regular and low literate forms), IPAT

Rorschach Inkblot Technique

REFERENCES

This bibliography contains three sections. The first section lists items that discuss neurological assessments in general and specific neurological deficits. The second section lists items concerning screening and placement procedures. The third section lists items that discuss teaching strategies and techniques. Although many of the references report on experiences with LD children, much from these particular items can be interpolated into adult instruction.

Neurological Assessments

- Arter, J. A., & Jenkins, J. R. (1979). Differential diagnosis-prescriptive teaching: A critical appraisal. Review of Educational Research, 49, 517-555.
- Barkley, R. A. (1983). Neuropsychology: Introduction. Journal of Clinical Child Psychology, 12, 3-5.
- Bender, L. (1947). Childhood schizophrenia: Clinical study of one hundred schizophrenic children. American Journal of Orthopsychiatry, 17, 40-55.
- Coleman, J. C., & Sandhu, M. (1967). A descriptive relational study of 364 children referred to a university clinic for learning disorders. Psychological Reports, 20, 1091-1105.
- Coles, G. (1978). The learning disabilities test battery: Empirical and social issues. Harvard Educational Review, 48, 313-340.
- Gomex, E. H. (1967). Minimal cerebral dysfunction (Maximum neurological confusion). Clinical Pediatrics, 6, 589-591.
- Luria, A. R., & Majovski, L. V. (1977). Basic approaches used in American and Soviet clinical neuropsychology. American Psychologist, 32, 959-968.
- Plaistad, J. R., Gustavson, J. L., Wilkening, G. N., & Golden, C. J. (1983). The Luria-Nebraska Neuropsychological Battery--Children's Revision: Theory and current research findings. Journal of Clinical Child Psychology, 12, 13-21.

- Reitan, R. M., & Davison, L. A. (1974). Clinical neuropsychology: Current status and applications. New York: Winston-Wiley.
- Strauss, A. A., & Lehtinen, L. E. (1947). Psychopathology and education of the brain-injured child. New York: Grune & Stratton.
- Winkler, A., Dixon, J. F., & Parker, J. B. (1970). Brain function in problem children and controls: Psychometric, neurological, and electroencephalographic comparisons. American Journal of Psychiatry, 125, 94-105.

Screening and Placement

- Adelman, H. S. (1982). Identifying learning problems at an early age: A critical appraisal. Journal of Clinical Child Psychology, 11, 255-261.
- Adelman, H. S., & Taylor, L. (1983). Learning disabilities in perspective. Glenview, IL: Scott, Foresman.
- Badian, M. (1976). Early prediction of academic underachievement. Paper presented at the meeting of the 54th Annual International Convention of the Council for Exceptional Children, Chicago. (ERIC Document Reproduction Service No. ED 122 500).
- Berk, R. A. (1984). An evaluation of procedures for computing an ability-achievement discrepancy score. Journal of Learning Disabilities, 17, 262-256.
- Freund, J. H., Bradley, R. H., & Caldwell, B. M. (1979). The home environment in the assessment of learning disabilities. Learning Disability Quarterly, 2, 39-51.
- Gallagher, J. J., & Bradley, R. H. (1972). Early identification of development difficulties. In I. J. Gordon (Ed.), Early childhood education. Chicago: University of Chicago Press.
- Hobbs, N. (1975). The futures of children: Categories, labels, and their consequences. San Francisco: Jossey-Pass.
- Illich, I. (1976). Medical nemesis. New York: Pantheon.
- Keogh, B. K., & Becker, L. D. (1973). Early detection of learning problems: Questions, cautions, and guidelines. Exceptional Children, 40, 5-11.
- Melton, G. B., Koocher, G. P., & Saks, M. (Eds.), (1983). Children's competence to consent. New York: Plenum.
- Mercer, J. R. (1979). System of multicultural pluralistic assessment: Technical manual. New York: Psychological Corp.

- Satz, P., & Fletcher, J. (1979). Early screening tests: Some uses and abuses. Journal of Learning Disabilities, 12, 56-60.
- Schaer, H. F., & Crump, W. D. (1976). Teacher involvement and early identification of children with learning disabilities. Journal of Learning Disabilities, 9, 91-95.
- Schrag, P., & Divoky, D. (1975). The myth of the hyperactive child and other means of behavioral control. New York: Pantheon.

Prevailing Assessment

- Alley, G., & Deshler, D. D. (1979). Teaching the learning disabled adolescent: Strategies and methods. Denver: London Publishing Co.
- Fernald, G. (1943). Remedial techniques in basic school subjects. New York: McGraw-Hill.
- Hammill, D. D. & Bartel, N. R. (1982). Teaching children with learning and behavior problems (3rd ed.). Boston: Houghton Mifflin.
- Sabatino, D. A., Miller, T. L., & Schmidt, C. R. (1981). Learning disabilities: Systemizing teaching and service delivery. Rockville, MD: Aspen.
- Salvia, J., & Ysseldyke, J. E. (1981). Assessment in special and remedial education (2nd. ed.). Boston: Houghton Mifflin.
- Smith, C. R. (1983). Learning disabilities: The interaction of learner, task, and setting. Boston: Little, Brown and Co.
- Smith, D. D. (1981). Teaching the learning disabled. Englewood Cliffs, NJ: Prentice-Hall.

SPECIAL BIBLIOGRAPHY

The following bibliography is included for the adult education teacher who encounters a learning disabled student and feels the need to build a general background knowledge, or special knowledge in the areas of history and court cases (including the three major task forces, the Child Service Demonstration Centers, and L. D. Research Institute); or characteristics that have been identified as related to LD. and brain functioning.

General Readings

- Adelman, H. S. and Taylor, L. (1983). Learning disabilities in perspective. Glenview, Illinois: Scott, Foresman & Co.
- Lynn, R. (1979). Learning Disabilities: An overview of theories, approaches, and politics. New York: Free Press
- Osmen, Betty B. (1982). No one to play with: The social side of learning disabilities. New York: Random House.
- Smith, Sally L. (1978). No easy answers. New York: Bantam.
- Smith, C. R. (1983). Learning disabilities: The interaction of learner, task and setting. Boston: Little, Brown, and Company.

History and Court Cases

- Chalfatn, J. C., & Scheffelin, M. A. (1969). Central processing dysfunctions in children: A review of research. (Phase III.) NINDS Monograph No. 9. Bethesda, MD: U. S. Dept. of Health, Education, and Welfare.
- Church, R. L., & Sedlak, M. W. (1976). Education in the United States. New York: Free Press.
- Clements, S. D. (1966). Minimal brain dysfunction in children: Terminology and identification. Phase one of a three-phase project. NINDS Monograph No. 3. U. S. Public Health Service Publication No. 1415. Washington, D. C. U. S. Government Printing Office.
- Haring, N. G., & Miller, C. A. (1969). Minimal brain dysfunction: Educational, medical, and health related services. (Phase II), M & SDCP Monograph, Public Health Publication No. 2015. Washington, D. C.: U. S. Department of Health, Education, and Welfare.
- Mann, L., Cartwright, G. P., Boyer, C. W., Jr., Metz, C. M., & Wolford, B. (1984). The Child Service Demonstration Centers: A summary report. Exceptional Children, 50, 532-540.
- Ross, S. L., DeYoung, H. G., & Cohen, J. S. (1971). Confrontation: Special education placement and the law. Exceptional Children, 38, 5-12.
- Schmid, R. E., Moneypenny, J., & Johnston, R. (1977). Contemporary issues in special education. New York: McGraw-Hill.
- Tapp, J. L., & Levine, F. J. (Eds.) (1977). Law, justice, and the individual in society: Psychological and legal issues. New York: Holt, Rinehart & Winston.
- Weintraub, F. J., & Abeson, A. (1974). New education policies for the handicapped: The quiet revolution. Phil Delta Kappan, 55, 526-529.

- Wiederholt, J. L. (1974). Historical perspectives on the education of the learning disabled. In L. Mann & D. Sabatino (Eds.), The second review of special education. Philadelphia: JSE Press.

Related Characteristics

- Crinella, F. M. (1973). Identification of brain dysfunction syndromes in children through profile analysis: Patterns associated with so-called "minimal brain dysfunction." Journal of Abnormal Psychology, 82, 33-45.
- DeLoach, T. F., Earl, J. M., Brown, B. S., Poplin, M. S., & Warner, M. M. (1981). LD teachers' perceptions of severely disabled students. Learning Disability Quarterly, 4, 343-358.
- Deshler, D. D. (1978). Psychoeducational aspects of learning-disabled adolescents. In L. Mann & J. L. Wiederhold (Eds.), Teaching the learning-disabled adolescent. Boston: Houghton-Mifflin.
- Dykman, R. A., Ackerman, P. T., Clements, S. D., & Peters, J. E. (1971). Specific learning disabilities: An attentional deficit syndrome. In S. R. Myklebust (Ed.), Progress in learning disabilities, Vol. 2. New York: Grune & Stratton.
- Kuluger, G., & Kuluger, M. (1978). Study reported in G. Kuluger and C. J. Kolson, Reading and learning disabilities, 2nd ed. Columbus, OH: Merrill.
- Kass, C. E. (1966). Psycholinguistic abilities of children with reading problems. Exceptional Children, 32, 533-539.
- Owen, F. W., Adams, P. A., Forrest, T., Stolz, L. M., & Fisher, S. (1971). Learning disorders in children: Sibling studies. Monograph of the Society for Research in Child Development, 36, Serial No. 144.
- Routh, D. K., & Roberts, R. D. (1972). Minimal brain dysfunction in children: Failure to find evidence for a behavioral syndrome. Psychological Reports, 31, 307-314.
- Shepard, L. A., Smith, M. L., & Vojir, C. P. (1933). Characteristics of pupils identified as learning disabled. American Educational Research Journal, 20, 309-331.
- Vande Voort, L., Senf, G. M., & Benton, A. L. (1972). Development of audiovisual integration in normal and retarded readers. Child Development, 43, 1260-1272.
- Werry, J. S. (1972). Organic factors in childhood psychopathology. In H. C. Quay & J. S. Werry (Eds.), Psychopathological disorders in childhood. New York: Wiley.
- Wolff, P. H., & Hurwitz, I. (1973). Functional implications of the minimal brain damage syndrome. In S. Walzert & P. H. Wolff (Eds.), Minimal cerebral dysfunction in children. New York: Grune & Stratton.

- Yule, W., & Rutter, M. (1976). Epidemiology and social implications of specific reading retardation. In R. M. Knights & D. J. Bakker (Eds.), The neuropsychology of learning disorders. Baltimore: University Park Press.

Brain, Function and Learning Disabilities

- Caparulo, D. P., Cohen, D. J., Rothman, S. L., Young, G., Katz, J. D., Shaywitz, S. E., & Shaywitz, B. A. (1981). Computed topographic brain scanning in children with developmental neuropsychiatric disorders. Journal of the American Academy of Child 20, 338-357.
- Chall, J. S., & Mirsky, A. F. (Eds.) (1978). Education and the brain. Chicago: National Society for the Study of Education.
- Curtis, B. A., Jacobson, S., & Marcus, E. M. (1972). An introduction to the neurosciences. Philadelphia: Saunders.
- Denckla, M. B. (1979). Childhood learning disabilities. In K. Heilman & E. Valenstein (Eds.), Clinical neuropsychology. New York: Oxford University Press.
- Gaddes, W. H. (1980). Learning disabilities and brain function: A neuropsychological approach. New York: Springer-Verlag.
- Geschwind, N. (1979). Specializations of the human brain. Scientific American, 241, 180-201.
- Hartlage, L. C., & Telzrow, C. F. (1983). The neuropsychological basis for educational intervention. Journal of Learning Disabilities, 16, 521-528.
- Hiscock, M., & Kinsbourne, M. (1980). Individual differences in cerebral lateralization: Are they relevant to learning disabilities? In W. Cruickshank (Ed.), Approaches to learning, Vol. 1, The best of ACLD. Syracuse, N. Y.: Syracuse University Press.
- Hynd, G. W., & Cohen, M. (1983). Dyslexia: Neuropsychological theory, research, and clinical differentiation. New York: Grune & Stratton.
- Hynd, G. W., & Obrzut, J. E. (Eds.), (1981). Neuropsychological assessment and the school-age child: Issues and procedures. New York: Grune & Stratton.
- Luria, A. R., & Majovski, L. V. (1977). Basic approaches used in American and Soviet clinical neuropsychology. American Psychologist, 32, 959-968.
- Plaistad, J. R., Gustavson, J. L., Wilkening, G. N., & Golden, C. J. (1983). The Luria-Nebraska Neuropsychological Battery--Children's Revision: Theory and current research findings. Journal of Clinical Child Psychology, 12, 13-21.

- Reitan, R. M., & Davison, L. A. (1974). Clinical neuropsychology: Current status and applications. New York: Winston-Wiley.
- Rie, H. E., & Rie, E. D. (Eds.), (1980). Handbook of minimal brain dysfunctions: A critical view. New York: Wiley.
- Rourke, B. P. (1978). Reading, spelling, arithmetic disabilities: A neuropsychological perspective. In H. R. Myklebust (Ed.), Progress in learning disabilities. New York: Grune & Stratton.
- Rourke, B. P., Bakker, D. J., Fisk, J. L., & Strang, J. D. (1983). Child neuropsychology. New York: Guilford Press.
- Schain, R. J. (1972). Neurology of childhood learning disorders. Baltimore: Williams & Wilkins.
- Tarnopol, L., & Tarnopol, M. (Eds.), (1977). Brain function and reading disabilities. Baltimore: University Park Press.
- taylor, H. G., & Fletcher, J. (1983). Biological foundations of "Specific Developmental Disorders": Methods, findings, and future directions. Journal of Clinical Child Psychology, 12, 46-65.

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